

Implementation Of The Diesel Risk Reduction Plan: What Does It Mean For Agricultural Operations?



California Environmental Protection Agency

Air Resources Board

Overview

- What the plan expects
- Where do we focus our efforts
- Possible regulatory approaches
- How to participate in the process
- Next steps

What Does the Diesel Risk Reduction Plan Recommend for Agricultural Equipment?

- Reduction in diesel PM emissions from new and existing mobile, portable, and stationary agricultural equipment
- Use of low-sulfur diesel fuel
- Consideration of alternative technologies

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Implementation Goals

- Apply controls where it makes sense
- Maintain agricultural viability
- Foster use of incentives
- Encourage participation from agricultural community
- Address agricultural concerns

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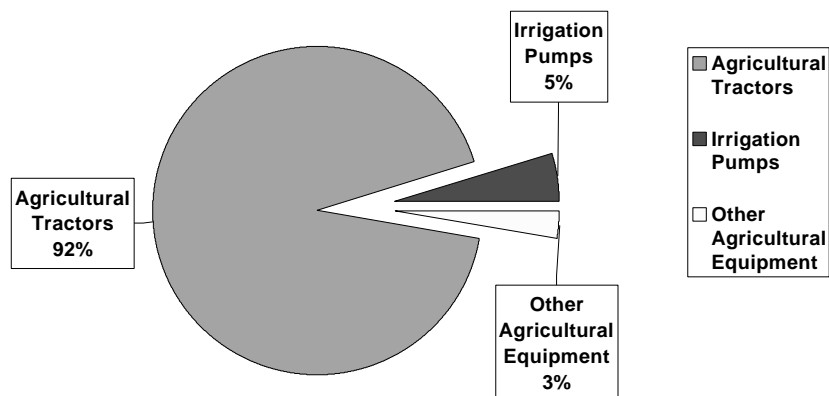
A Wide Variety of Agricultural Equipment is Used in California

- Tractors
- Irrigation pumps
- Combines
- Sprayers
- Balers
- Tillers
- Swathers
- Mowers



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Year 2000 Emissions by Major Categories of Agricultural Equipment



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Initial Focus on Categories with Highest Diesel PM Emissions

- Agricultural engines that emit over 97 percent of diesel PM emissions
 - tractors
 - irrigation pumps



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How Can we Reduce Diesel PM from New and Existing Agricultural Engines and Vehicles?

- Establish new engine standards
- Promote use of alternative technologies
- U.S. EPA needs to reduce emissions from new farm equipment < 175 hp
- Retrofit with catalyst-based DPFs
- Investigate opportunities for incentives to retrofit existing engines
- Voluntary non-regulatory programs

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What Factors Need to be Considered before Requiring Retrofits?

- **Cost of control**
 - needs to be reasonable
- **Technical feasibility**
 - DPFs available and demonstrated to work without compromising performance
- **Magnitude of emissions**
 - engine emissions rate
 - hours of operation
- **Useful life of equipment**

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How Can we Make Sure DPFs Will Work?

- **Many demonstration projects are underway or planned to demonstrate effectiveness of DPFs**
 - On-road vehicles
 - Stationary equipment
 - portable equipment
 - Off-road vehicles
 - agricultural engines and equipment
 - construction equipment

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How Will the ARB Ensure Agricultural Concerns are Addressed

- International Retrofit Advisory Committee
- Agricultural Working Group
 - forum to discuss regulatory development issues specific to agricultural operations
- Extensive public participation

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How Does The Agricultural Community Participate?

- Participate in public consultation meetings and workgroups
- Submit your e-mail address to ARB to receive e-mail alerts or, visit ARB's internet site
- Provide input to your local Farm Bureau representative



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Next Steps

- We have scheduled 8 agricultural consultation meetings throughout California.
- Public consultation meeting, February 14, 2001
 - focus on stationary and portable engines
- Design and implement agriculture demonstration projects
- Meet with engine manufacturers and interested stakeholders
- Quarterly updates on ARB's progress in developing regulations for agricultural operations will be placed in the California Farm Bureau's "Ag Alert"

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